

IN THE CLAIMS:

1. (Currently amended) An implantable delivery device for delivery of at least a first therapeutic agent into a target tissue, comprising: a housing, said housing comprising a reservoir with a drug release port for release of at least a first therapeutic agent into a target tissue, said reservoir having at least a first wall that is substantially impermeable to a first therapeutic agent to be placed therein, a sealing base for sealing said release port to a target tissue, wherein when said release port is sealed to a target tissue a first therapeutic agent in said reservoir is substantially prohibited from release by said device other than through said release port into the target tissue, and an attachment mechanism to facilitate sealing of said release port to a target tissue, said attachment mechanism comprising at least one member of the group consisting of a sufficient amount of an adhesive for adhering said sealing base to a target tissue wherein said adhesive is held within at least one cavity or channel within said sealing base, a suture holder for engaging at least one suture operatively attached to the surrounding tissue, and a band for engaging said device with a target tissue, wherein said reservoir comprises a first cavity that is connected to a first refilling port through a first tube.

2-3. (Canceled).

4. (Currently amended) The device of claim 1, wherein said first tube is connected to said housing via a protruding part that permits said first cavity to communicate with said reservoir ~~by a first valve~~.

5. (Previously presented) The device of claim 4, wherein said first refilling port comprises a first refilling port cavity.

6. (Previously presented) The device of claim 1, wherein said first refilling port can be implanted at a different site from the device location.

7 - 9. (Canceled).

10. (Previously presented) The device of claim 1, wherein said first refilling port comprises at least one septum.

11. (Previously presented) The device of claim 10, wherein said at least one septum comprises a self-sealing material selected from the group consisting of latex, a synthetic rubber and a silicone elastomer.

12 - 15. (Canceled).

16. (Withdrawn) The device of claim 10, wherein said septum is identifiable by imaging techniques selected from the group consisting of magnetic resonance imaging, x-ray, computerized tomography and ultrasound.

17. (Withdrawn) The device of claim 1, wherein said reservoir has at least a second cavity, said second cavity connected to a second refilling port through a second tube.

18. (Canceled).

19. (Currently amended) The device of claim 1, wherein said first refilling port is shaped to facilitate its implantation onto or into tissues.

20 - 21. (Canceled).

22. (Previously presented) The device of claim 1, wherein said first refilling port comprises a pump.

23. (Previously presented) The device of claim 22, wherein said pump is selected from the group consisting of an iontophoretic pump, a mechanical pump, and an osmotic pump.

24 - 27. (Canceled).

28. (Currently amended) The device of claim 1, wherein said a-therapeutic agent is a prophylactic agent.

29. (Canceled).

30. (Withdrawn) The device of claim 1, wherein said attachment mechanism comprises an adhesive layer.

31. (Withdrawn) The device of claim 30, wherein said adhesive layer can be applied during implantation of said device.

32. (Withdrawn) The device of claim 30, wherein said adhesive layer comprises a pressure-sensitive adhesive.

33. (Withdrawn) The device of claim 32, wherein said pressure-sensitive adhesive is selected from the group consisting of a hydrocolloid, a hydrogel, an acrylate and a silicone.

34. (Withdrawn) The device of claim 30, wherein said adhesive layer comprises a release liner.

35. (Original) The device of claim 1, wherein said reservoir carries a solid, liquid, viscous or gel-state therapeutic agent.

36. (Canceled).

37. (Previously presented) The device of claim 1, wherein said therapeutic agent is in a slow-release formulation.

38. (Currently amended) The device of claim 1, wherein said release port is comprises a structural element to retain a therapeutic agent in said reservoir, wherein said structural element comprises one of the group consisting of a crossing band, a strip, a net and flanges.
39. (Canceled).
40. (Currently amended) The device of claim 38, wherein said structural element comprises at least one biocompatible and non-dissolvable material selected from the group consisting of a poly-ester, a poly-orthoester, a silicone, a polyethylene, a polypropylene, a polyurethane, and a metal.
41. (Withdrawn) The device of claim 38, wherein said structural element comprises at least one biocompatible and bioerodible material selected from the group consisting of glycolic acid, lactic acid, poly-ethylene-glycol, poly-vinyl-alcohol, poly-vinyl-pyrrolidone and methacrylates.
42. (Previously presented) The device of claim 1, wherein said release port comprises a film that is permeable to a therapeutic agent to be placed in said reservoir.
43. (Previously presented) The device of claim 42, wherein said film comprises at least one compound selected from the group consisting of a glycolic acid, a lactic acid, a poly-ethylene-glycol, a poly-vinyl-alcohol, a polyvinylpyrrolidone, a methacrylates, cellulose, starch, ethylene vinyl acetate, and gelatin.
- 44 - 48. (Canceled).
49. (Withdrawn) The device of claim 1, further comprising a pressure-controlled pump for providing therapeutic agent to said reservoir.
50. (Canceled).

51. (Previously presented) The device of claim 1, wherein said therapeutic agent is a diagnostic agent.

52. (Canceled).

53. (Currently amended) The device of claim 4, wherein said said-valve comprises a septum.

54 -56. (canceled).

57. (Previously presented) The structural element of claim 38, comprising a porous barrier.

58. (Previously presented) The porous barrier of claim 57, wherein said porous barrier can control the diffusion interface between said reservoir and a targeted tissue.

59. (Previously presented) The porous barrier of claim 57, comprising at least a first porous membrane.

60. (Canceled).

61. (Previously presented) The porous barrier of claim 57, comprising a membrane formed of a material selected from the group consisting of a poly-orthoester, a poly-glycolic acid, a poly-lactic acid, a poly-caprolactone, a polyvinyl-alcohol, a polyvinyl-pyrrolidone, hyaluronic acid, fibrin, methyl-cellulose, collagen, ethylene vinyl acetate, a polyethylene, a polyurethane, a metal, and gelatin.

62-66. (canceled).

67. (Previously presented) An implantable delivery device for delivery of at least a first therapeutic agent into a target tissue, comprising: a housing, said housing comprising a reservoir with a drug release port for release of at least a first therapeutic

agent into a target tissue, said reservoir having at least a first wall that is substantially impermeable to a first therapeutic agent to be placed therein, a sealing base for sealing said release port to a target tissue, wherein when said release port is sealed to a target tissue a first therapeutic agent in said reservoir is substantially prohibited from release by said device other than through said release port into the target tissue, and an attachment mechanism to facilitate sealing of said release port to a target tissue, said attachment mechanism comprising at least one member of the group consisting of a sufficient amount of an adhesive for adhering said sealing base to a target tissue, a suture holder for engaging at least one suture operatively attached to the surrounding tissue, and a band for engaging said device with a target tissue, further comprising an osmotic pump.

68. (Currently amended) An implantable delivery device for delivery of at least a first therapeutic agent into a target tissue, comprising: a housing, said housing comprising a reservoir with a drug release port for release of at least a first therapeutic agent into a target tissue, said reservoir having at least a first wall that is substantially impermeable to a first therapeutic agent to be placed therein, a sealing base for sealing said release port to a target tissue, wherein when said release port is sealed to a target tissue a first therapeutic agent in said reservoir is substantially prohibited from release by said device other than through said release port into the target tissue, and an attachment mechanism to facilitate sealing of said release port to a target tissue, said attachment mechanism comprising at least one member of the group consisting of a sufficient amount of an adhesive for adhering said sealing base to a target tissue, a suture holder for engaging at least one suture operatively attached to the surrounding tissue, and a band for engaging said device with a target tissue, further comprising at least one mechanism for retaining a solid or viscous semisolid therapeutic material in said reservoir.

69. (Previously presented) An implantable delivery device for delivery of at least a first therapeutic agent into a target tissue, comprising: a housing, said housing comprising a reservoir with a drug release port for release of at least a first therapeutic agent into a target tissue, said reservoir having at least a first wall that is substantially

impermeable to a first therapeutic agent to be placed therein, a sealing base for sealing said release port to a target tissue, wherein when said release port is sealed to a target tissue a first therapeutic agent in said reservoir is substantially prohibited from release by said device other than through said release port into the target tissue, and an attachment mechanism to facilitate sealing of said release port to a target tissue, said attachment mechanism comprising at least one member of the group consisting of a sufficient amount of an adhesive for adhering said sealing base to a target tissue, a suture holder for engaging at least one suture operatively attached to the surrounding tissue, and a band for engaging said device with a target tissue, further comprising at least one reinforcement mechanism for preventing collapse of said reservoir.

70. (Previously presented) The device of claim 69, wherein said at least one reinforcement mechanism comprises metal.